AMENDMENT

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1. (Withdrawn) A method for quantitating an analyte comprising measuring fluorescence emission from a fluorescent label specifically associated with an analyte bound directly or indirectly to a cross-linked allophycocyanin molecule, where the cross-linked allophycocyanin has not been exposed to strongly chaotropic materials after cross-linking.

Claim 2. (Currently amended) A method for quantitating an analyte by measuring time resolved transfer of fluorescence energy to or from ~~of~~ a label quantitatively associated with the analyte, said method comprising measuring energy ~~absorbed by~~ transferred from donor compounds having the ability to absorb light energy and then ~~transferred~~ transfer this energy to cross-linked allophycocyanin by ~~detecting allophycocyanin~~ using time-resolved detection of fluorescence emission ~~in a time-resolved manner~~, wherein said cross-linked allophycocyanin has not been exposed to strongly chaotropic agents after cross-linking.

Claim 3. (Previously presented) In a method for quantitating an analyte by measuring time resolved transfer of fluorescence energy to or from a label quantitatively associated with the analyte, the improvement wherein the energy transferred from donor compounds having the ability to absorb light energy and then transfer this energy to cross-linked allophycocyanin is measured using time-resolved detection of fluorescence emission, and wherein the cross-linked allophycocyanin has not been exposed to strongly chaotropic agents after cross-linking.

Claim 4. (Previously presented) The method of claim 3, wherein the donor compounds comprise a metal.

Claim 5. (Original) The method of claim 4, wherein the metal is a lanthanide series metal.

Claim 6. (Previously presented) The method of claim 5, wherein the lanthanide metal is selected from the group consisting of europium and ruthenium, which may optionally be chelated or in a cryptate.

Claim 7. (Previously presented) The method of claim 3, wherein non-cross-linked monomeric subunits have not been removed from the cross-linked allophycocyanin molecule.

Claim 8. (Previously presented) The method of claim 3, wherein the cross-linked allophycocyanin preparation has at least 20% but less than 50% of all alpha subunits of the allophycocyanin molecules linked to no more than one beta subunit.

Claim 9. (Previously presented) The method of claim 3, wherein the cross-linked allophycocyanin has an absorbance spectrum characterized by a ratio of areas under the absorbance spectrum between 500-700 nm to the area between 250-300 nm of at least 4.

Claim 10. (Previously presented) The method of claim 3, wherein said method is performed in homogeneous solution or suspension.

Claim 11. (Previously presented) The method of claim 3, wherein at least two distinct donor species are present, said distinct donor species having different fluorescence lifetimes.

Claim 12. (Original) The method of claim 11, wherein said distinct donor species absorb at the same wavelength.

Claim 13. (Currently amended) The method of claim 3, wherein at least two distinct donor species are present, said distinct donor species having different absorption ~~spectrum~~ spectra.

Claim 14. (Previously presented) The method of claim 3, wherein at least two distinct donor species are present, said distinct donor species forming donor/acceptor pairs having the same lifetime and color but being distinguishable by fluorescent intensity.